DOCUMENT RESUME

ED 086 590 SO 006 775

AUTHOR Zimmerman, Joseph; Zimmerman, Elaine H.
TITLE Towards a Humanistic Behaviorism Approach to Turning on Teachers: Some Observations, Rationale and Teacher Projects.
PUB DATE May 71
NOTE 11p.; Paper presented at the Annual Conference on Behavior Analysis in Education (2nd, Lawrence, Kansas, May, 1971)

EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS Behavioral Objectives; Behavioral Science Research; *Behavioral Sciences; *Behavior Change; Conference Reports; *Emotional Response; Humanization; *Personal Values; Precision Teaching; Student Behavior; *Teacher Attitudes; Training Objectives

ABSTRACT

By addressing the areas of feelings and value judgements the goals of a relationship between behaviorists and teachers can be clarified. The term "behavior modification" elicits negative emotional responses. Perhaps behaviorists should accept responsibility for the negativism and use a term such as Ogden Lindsley's "precision teaching." The term "self image" also elicits prejudicial responses; yet its aptness for explaining behavioral phenomenon, as in the instance where children improved their spelling ability during a treatment period and continued to improve after treatment ceased, predicates its existence in behavioral vocabulary. Value judgments are inherent in establishing behavioral targets and in identifying techniques to attain them. It is possible to choose the teacher's values, not the behaviorist's, and still apply behavior analysis in assessing goal attainment. A teacher applied our technique to his goal, but since values differed, attainment of the goal was not satisfying for the teacher because the technique was not acceptable to his value system. Values are the basic qualifiers of techniques and goals, but emotional response is a shaper of those values. (JH)

ED 086590

SP 006 775

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Towards a Humanistic Behaviorism Approach to Turning on Teachers: Some Observations, Rationale and Teacher Projects[1]

Joseph and Elaine H. Zimmerman
Indiana University School of Medicine

It feels very good to be here again this year. We are eager to share some experiences and insights with you. We will be addressing ourselves to the areas of feelings and value judgments and how they might influence our effectiveness in turning teachers on.

We will present no hard data to support what we hope to communicate to you. The data we do present will be given in order to illustrate RATHER than substantiate by unchallengable experimental design.

It is no revelation that words can have enormous emotional impact. They can set the stage for effective communication or they can immediately lead to an instant blocking and pre-empting of such communication. One of the issues which we will discuss is simply this phenomenon. Though we widely recognize its import and frequently even pay lip service to it, as applied behavioral scientists we often ignore it. The second issue which we will touch upon is that of value judgments....ours, teachers, and those evolving from the educational system itself.

We will be asking you to consider seriously as human beings as well as professionals what we are about and what our end goals are. If our technology is indeed as powerful as we say it is, can we afford to remain unconcerned about long term goals and purposes? We think not. We feel that behavior analysts must be concerned with the overall direction in which we choose to move.

A predominant phenomenon underlying the world scene in the last ten years has been the current demand by individuals, separately and collectively, to gain control over their personal and professional destinies. How does our general approach to education fit? Programs and approaches to improved education are a dime a dozen. Ask any teacher. As long as such programs are conceived and executed with little or no functional teacher participation, leadership, and consultation, they can be skillfully undermined (openly or otherwise). To the degree that we as human beings are concerned with the personal feelings of freedom and integrity, we need to regard the teacher as a colleague, rather than as "our" technician. It is vital for us to recognize when we proselytize, that as in any communication there is a sender and a receiver. Each of us plays both roles in communication, and poor communication can lead to alienation.

If, in the next half hour, you choose to come where we are, then accept only that we accept the following on the basis of personal growth experiences. All of us have feelings. Some of us learn to tune in to those feelings, others learn to convert them into other response patterns which act as smoke screens, and finally some of us may learn not to feel much of anything. Wherever we are with respect to our feelings, some of us are extremely sensitive to the feelings of others while some of us are too much into ourselves to be aware. The feelings that arise when we behavior analysts talk to each other and to others whom we would eagerly influence, may in some real way constitute the most critical variable in our communications, and perhaps the reason we have not had the impact that our ten year history might suggest.

Try now to place yourselves in the situation I will describe and then tune into your feelings. Imagine yourselves as having just presented a talk to teachers

---

[1] Presented at the Second Annual Conference on Behavior Analysis in Education, Lawrence, Kansas, May, 1971.

FILMED FROM BEST AVAILABLE COPY

or any similar group to which you are trying to explain the behavior modification approach. At the finish, several members of the audience say familiar things like, "The behavioristic approach is dehumanizing. It is mechanistic. You Skinnerians don't deal with the whole person". (Speaker pauses here for about ten seconds).

Some of you may have felt nothing, some frightened, some angry, some detached, some contemptuous, some amused, some amazed, and hopefully, some concerned. Of course, some of you may have failed to put yourselves into the situation, and some may even have decided that the Zimmerman's have flipped out. But hang in there. You have nothing to lose!

Try another little exercise. Imagine that you are in an audience and you are being addressed by Joe Zimmerman. Tune in again to your feelings. If I had a behavior or emotional problem and I sought your "help", I would not want to be modified, managed, programmed or trained. I would want you to help me to grow, to self-actualize, to feel better about myself, TO IMPROVE MY SELF-CONCEPT. (Speaker pauses here for about ten seconds). Now, that I have paused awhile to let you see where your gut is at, let me simply say that both of these "exercises" provided you with a chance to observe that language and words have a function other than sheer verbal communication of information. And, of course, most of us recognize or at least pay lip service to that. Yes, words as stimuli have many functions. They reinforce, punish, act as discriminative stimuli and they are also eliciting stimuli as the Russians have clearly shown at the level of physiological responses. When they serve as discriminative stimuli they also can be extremely aversive. If their aversive function is prepotent over their discriminative function, alienation is the major result.

Getting back to my example of my seeking help, would a rose by any other name smell as sweet? That is, if you indeed helped me with an effective procedure, would I care what you called your methodology? Probably not! But I might not come back to you to give you a chance to help me if the words you used in first describing what you were going to do were aversive to me.

Many of us, when "attacked" as being dehumanizing or mechanistic simply laugh or shake our heads. Others get defensive. Others say "sometimes the magic works and sometimes it doesn't." Some of us simply ignore the emotional impact and rationally appeal to the functional aspects of our approach. "It works! It improves behavior!" But if for some of our listeners our words are a turn off, or worse, a set of extremely aversive stimuli, they could be functional, but in the wrong direction. Some who feel we are mechanistic may be in a position of power and functionally able to upset our plans and block our actions. And if this is the case, don't we OWN some of those functional outcomes? We could say that its "their problem", and often that might be so. But have we, who know all about shaping, no ownership? The research of Azrin and Ulrich and others certainly shows that pain-elicited aggression is a real phenomenon. Can we dismiss or ignore such results as they have implications to our own professional and personal verbal behavior.

As an example of emotional effects of verbal stimuli I can remember the initial effect that an article by Haughton and Ayllon (1965) had on my guts. If you recall, the authors shaped a schizophrenic patient to be a "compulsive broom carrier" and then did the nasty trick of asking two psychiatrists to evaluate the patient's behavior. The psychiatrists' remarks were pretty bizarre. Almost as bizarre as the broom carrying. My first reaction was one of elation. "Get em, Eric and Ted", I said. Now I use that article to sell psychiatrists and others.

How? I use it as an example of great work and great potential alienation. Whether or not "get em" was its purpose, this indeed has, at times, been its function. By the way, I might say, that at times, after I present that article in this way, some of my listeners go back and read the article and later report that they have rescued the baby from the hostile bath. Note that the hostility could be in either the writer, the reader or both.

So, verbal communication can have side effects which might alienate. Like the words "dehumanizing", "mechanistic", "self-actualization", "self-concept", "humanistic", "humanness", "growth", etc. And so similarly can words which WE commonly use today like "behavior modification", "behavior management", "control", "manipulation", and try this on for size...."teacher training." As I mentioned here last year when my talk had no title and it was given that latter title, "teacher training sounds like toilet training or obedience training to me." How might those words sound to a teacher who considers herself a professional? If our gut reacts badly to the first list of words, so may the guts of others react similarly to our own words.

Finally, I must say that whether for other reasons or these (I can't get into Ogden Lindsley's head), Og in his concern about words and labels, comes up with terms that, in our opinion, have far less emotional impact of the alienating sort on those he wishes to influence. To us, "Precision Teaching" or "Precision Rehabilitation" not only say it like it is, but might be less alienating with respect to our practitioner listeners than the words "behavior modification".

If we wish to push precise and objective methodology and careful assessment of environmental variables and treatments, must we assume that our use of imprecise language for the purpose of reaching out and communicating will necessarily lead to our losing our ability to do functional work or to our failure to help others to do the same? We think not. Indeed, if the words we do use are aversive to our listeners and thus turn them off, or worse, make them hostile, should we not look to ourselves and to our contribution to alienation?

One last point with respect to language. It has to do with what Elaine and I call the "self-image phobia". We tend to over-react, at times, to this and similar terms. After all, "self-image" is hard to define and not subject to objective measurement. Can we ignore it simply on that basis? We have tried to say "NO!" for reasons of communication. But can we even ignore it from a scientific point of view? At the level of interpreting data, there are some phenomena which are not simply explained. Many interpretations can be applied to such phenomena. If the inductive approach is good science (see Platt, 1964), then we accept that some phenomena can be explained only by listing multiple hypotheses and then doing experiments to eliminate some of the alternative hypotheses. One phenomenon which many of our teachers have observed has been previously described by Og Lindsley (1967). It is the observation of academic acceleration both as a consequence of the application of a treatment AND following the removal of that same treatment. (As an aside, Og has stated that such treatments are the ones which are most effective in changing behavior since they are, as he puts it, "therapeutic" rather than "prosthetic." But as he indicates, it is hard to publish such results since they don't show reversibility). Slides 1 and 2 show three examples of this phenomenon and we would add that we have seen many other similar examples in our teacher reports. Slide 1 presents data collected by Donna Lee Evans, a fifth grade teacher. She worked with two of her students who "consistently failed their weekly spelling tests". She made up a list of 50 spelling words from their fifth grade spelling book and gave each of them this list to take home and study. She then

gave both students a spelling test daily for 15 consecutive days. During the first five (Baseline) days they were given all 50 words from the list but not given any knowledge of results. After the fifth test was administered and marked, the students were told how they did on each of the five tests and then asked what they would like to earn if they could improve their test scores. Both asked whether they could work for a period in the school library! Their teacher made arrangements for this and then told them that during the next five (Treatment) days they could work one full period in the library on each day that they bettered their highest previous test score. At the beginning of the third week of the project, the students were told that they could no longer earn the library period, but that their teacher wanted to see how well they could do on their own. Slide 1 shows that in the case of both students, while little change occurred in their daily test scores during the initial five-day Baseline period, each improved daily under the Treatment conditions. Of greatest import, however, may be the fact that one student continued to improve following the removal of the Treatment conditions, while the other's scores accelerated markedly over the final five project days. Slide 2 presents similar results obtained with a "poor math" student by Sandra Sue Petro, a second grade teacher. She administered a two-minute, 25-item subtraction facts test daily for 15 days to ten students who consistently scored poorly on math tests. Her procedures were basically the same as those used by the previous teacher except that a) each student was given a scorecard on which to insert their scores after each Treatment test and a piece of candy on each day that they bettered their previous high score, and b) reinstatement of Baseline conditions involved, in part, their being told that the supply of candy had run out. Slide 2 presents the results she obtained with one of the ten students. These results again show acceleration both <u>during</u> and <u>following</u> removal of the Treatment conditions.

We would like to issue a challenge to you. On the assumption that this phenomenon is real, one of the many alternative hypotheses which might account for such observations is that a student's "self-image" was improved by his improvement under Treatment conditions and that such internal changes (feelings, etc.) can account for observed further academic acceleration. The fact that we can't define self-image and thus can't directly measure it, is no ground for ignoring the possibility that the way one feels about oneself plays an important role in this phenomenon. What we are saying is that we should be careful about quickly dismissing the use of a term such as "self-image" on our part, or of taking too lightly or punishing its use on the part of our listeners. Some people including the Zimmermans strongly believe that this is a real set of feelings, and the scientist cannot really dismiss it as an explanatory concept or potentially real variable merely because he can't define it. It's demise (if that's what we're after) rests upon our showing <u>experimentally</u> that we can do crucial experiments which eliminate it as an alternative hypothesis.

Now we would like to turn to what we call the "don't get involved with value judgments" hangup. Last year at this conference, one of the brain storming sessions which Elaine attended was to deal with the topic entitled, "Is behavior analysis being used to shape children into a bad educational system?" Elaine reported that the participants had enormous difficulty even beginning to face this topic and discuss it, let alone make an attempt to resolve it at some level. Don't we make value judgments each time we involve ourselves in an applied project? When we ask a teacher to do our thing, and we choose a behavioral target for our own experimental convenience, are we not making a value judgment? If we could either do a project which measures bad conduct or a project which measures academic work and we choose the particular measure on the basis of our own convenience rather that on the basis of the student's growth as a person, we are most certainly involved with making value judgments. When we do not include the teacher (and per-

haps even the student) as an equal member of the team, if not the most important member when it comes to deciding upon the behavior to be measured and the treatment to be used (both of these being value judgments) we may be totally ignoring the teacher's potential growth and we could be setting the occasion for his immediate or eventual alienation. And finally, when we get into logical battles and debates with teachers over their attitudes with respect to our recipes, we may be ignoring not only the importance of values but also of feelings. As an example, Roger Ulrich and others have talked about the way they have handled teachers who have objected to tangible reinforcement as bribery. They appeal to the dictionary. This approach has two problems. First, not all dictionaries include the connotation of illegal or immoral as part of the definition of bribery. Second, a teacher might be saying, "that is not a treatment I would be comfortable using", or "that isn't compatible with my values and approaches and feelings in the classroom."

Our approach to turning on teachers does not involve selling recipes. We are not invested in particular recipes. We are more invested in teaching teachers to systematize what they do so that they can take account of what they do. We see classroom behavior management more as a way of striving for accountability than as a way of obtaining data. We point out to teachers that both the choice of a behavior target and the choice of a particular management technique lie within the realm of value judgment. Once a responsible party or team makes this choice, then we see behavior analysis, in part, as a method of assessing the treatment in terms of whether it improves behavior, has little or no effect, or perhaps even makes things worse. We help our teachers to learn how to take account of their own classroom practices. We ask them to do their own thing but with precision. As a result, we think that we are learning much about value judgments.

Early in our teacher's course (in what we will henceforth call "precision growth") we encourage the teachers to talk about value judgments and we make sure to continue to do so throughout the course whenever it is pertinent. One of the things we've found out is that the very type of dependent variable which up to now has been most preferred by behavior analysts as a group, (the "bad conduct" measures), is the kind of variable which consistently leads to debating and criticizing behavior among our teachers. We think that we have been wise to encourage the teachers to discuss their value judgments in the class and to refrain from giving them recipes. If we were to do the latter, and if the teacher were to obtain no positive results, or worse, psychonoxious results, he could then easily have us own those results and write us off. In contrast, when he calls the shots, he must own the results. And when he owns them, he can learn much about his own behavior as it influences the behavior of his students.

Perhaps the most extreme example which we have been involving the strong effect of a teacher's value judgment has occurred this semester. One of our teachers, Dennis Pyritz, was extremely resistant to the use of teacher-or psychologist-arranged contingencies. He teaches a class of eight, "educable, mentally retarded", junior high school students. He tried to create a Summerhill atmosphere and operation in his class, hoping that he could recapture for his students the situation which, as he sees it, "maximizes personal growth and freedom". In his initial attempts to explore this, he simply listed all the possible academic exercises that each of his students could do if they chose, and counted the number of these that each turned in per day under a totally permissive classroom atmosphere. He found that little work was being done but hoped to reach that point eventually by continued "respect and permissiveness and acceptance". He had yet to discover the method of approach which would get the kids to "work for themselves". To get credit for taking our course, however, he knew that he had to apply conditions which might increase productivity (his goal). Not knowing how to do it "his way", he asked us (grudgingly) to give him a recipe which might be

effective. We suggested that he consider employing a Premack approach, and in his concern about course credit (a concern perhaps incompatible with his particular concern about his students) he went along with our suggestion although obviously resistant to it. His permissive treatment served as his Baseline condition. His Treatment condition involved allowing each given student to have ten minutes of free play time after completing two academic exercises and to have the rest of the day to do whatever he wanted after completing his third exercise. Slide 3 presents the data collected over 19 successive school days across the entire class. Under the Treatment condition a total of 24 would represent each student completing each of three exercises per day. (The two circled points are data from days in which one student was absent). Slide 3 shows that class productivity was extremely poor under Baseline conditions and almost perfect (defined as three exercises each day per student) under the Treatment conditions. One would think that this teacher's data would really have convinced him that the kind of contingency which he finally employed really can do the job with respect to his goal (which it did) and that this would have turned him on! Let me read you portions of the concluding section of his project report to give you a notion about just how he was turned on. "The results of this experiment seemed to show clearly that the treatment condition was effective in that in most all of the cases the required behavior achieved full strength. If efficiency is the value underlyihg the motive of the experiment, then the experiment achieved some success..... Clearly there are, however, natural contingencies in effect maintaining the behavior's[2] strength in the pre-school child. And these same contingencies lose strength during the early school years (or so it seems) so that they must (we think) be supplemented by teacher imposed contingencies. Perhaps some research should direct itself toward reinstating and identifying, if possible, those earlier, natural contingencies.... It is, of course, a value judgment which gives preference to this kind of learning over the situation in which the child learns that secondary reinforcers such as leisure and money are more important and that he must perform some behavior for someone else in order to receive them. Perhaps in the present culture the reality of the situation is that. And it is a general temptation for psychologists and teachers alike to get people to perform for them. The destruction of those pre-school contingencies could amount to something on the order of Sin!"

This teacher, in effect, questioned whether the ends which he approved of (productivity, one value judgment) justified the means which he found aversive (teacher-imposed contingencies, a second value judgment). In giving him a recipe, we helped him to formulate and then implement a project which met part of his own course-credit contingency. He was not elated by the results! While one might argue that this teacher was evading the issue, one can't quarrel with the fact that in his case, success with respect to his goal was not enough.

There is a real danger in our not facing the issue of value judgments even with respect to our own goals. When we come on as the great white father in a Red Cross truck, we may indeed turn people off. Sometimes it is with sheer religious fervor that we express our pet recipes. If we doubt it, why not ask our listeners for feedback. We might learn more about our own communication deficits. Elaine and I have NEVER applied a "recipe" that "works" for all subjects when, in the past, we took the role of calling the shots or served as teachers. Indeed,

---

[2] The teacher is referring to behaviors in the pre-school child analogous to those demanded of students by teachers, but without such demands.

we often obtained results which showed specific recipes to be ineffective with given subjects. It is curious that few studies in our literature which report the results of a given set of treatments on more than one subject show that one or more subjects were not improved by the same techniques that led to success in others. We wonder to what extent these observations are differentially reinforced by publication or rejection practices?????? Perhaps it is time to admit that some of our own behaviors are influenced by our own personal feelings and values and insecurities. And perhaps when we know ourselves better, and own more of ourselves, we will be able to discriminate the difference between what we do as scientific endeavor and what we do as human beings who just happen to also be scientists.

Instead of summing up we would prefer to share with you a common experience on the feeling level. The extent to which you tune into yourself and to your feelings, is the extent to which you may discover something about yourself. Please reach out and take the hand of the person to your right. Please do not talk. Close your eyes for one minute while you hold hands. Relax your shoulders and quietly feel. Please don't talk. Just tune into your feelings, whatever they may be. (Pause for at least 30 seconds).

Now open your eyes but do not talk yet and face the person whose hand you have been holding. Continue holding hands and now face the person. Establish and try to sustain eye-contact. Talk to this person WITHOUT WORDS for another minute. (Pause for at least 30 seconds).

O.K. Take the next minute to communicate with your partner in any way you wish. You may be verbal or not. Sometimes people want to simply say, "Hey, I care." Sometimes they hug. Sometimes they just discuss what they felt. You may break this communication when you wish.... (wait awhile).

Thank you for your indulgence.

References

Haughton, E. and Ayllon, T. Production and elimination of symptomatic behavior. In L.P. Ullmann and L. Krasner (Eds.), Case studies in behavior modification. New York: Holt, Rinehart and Winston, 1965.

Lindsley, O.R. Operant behavior management: Background and Procedures. Paper presented at the Brecksville Institute, Brecksville, Ohio, May, 1967.

Platt, J.R. Strong Inference. Science, 1964, 146, 347-353.

Figure Legends

Slide 1. Number of words spelled correctly on a daily 50-word test by each of two fifth graders under Baseline and Treatment conditions.

Slide 2. Number of correct subtraction facts obtained on a daily 25-item test by a second grader under Baseline and Treatment conditions.

Slide 3. Number of academic exercises completed by class members daily under Baseline and Treatment conditions.

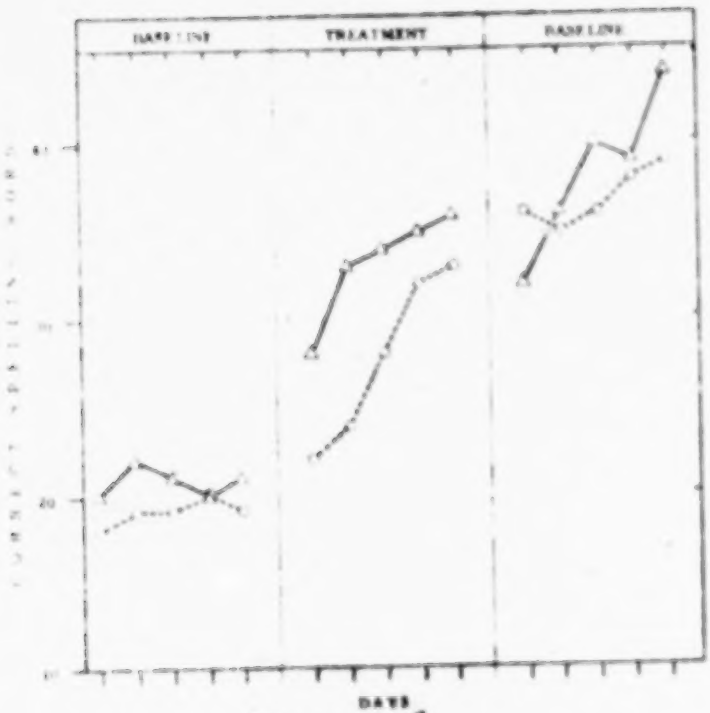

Figure 1

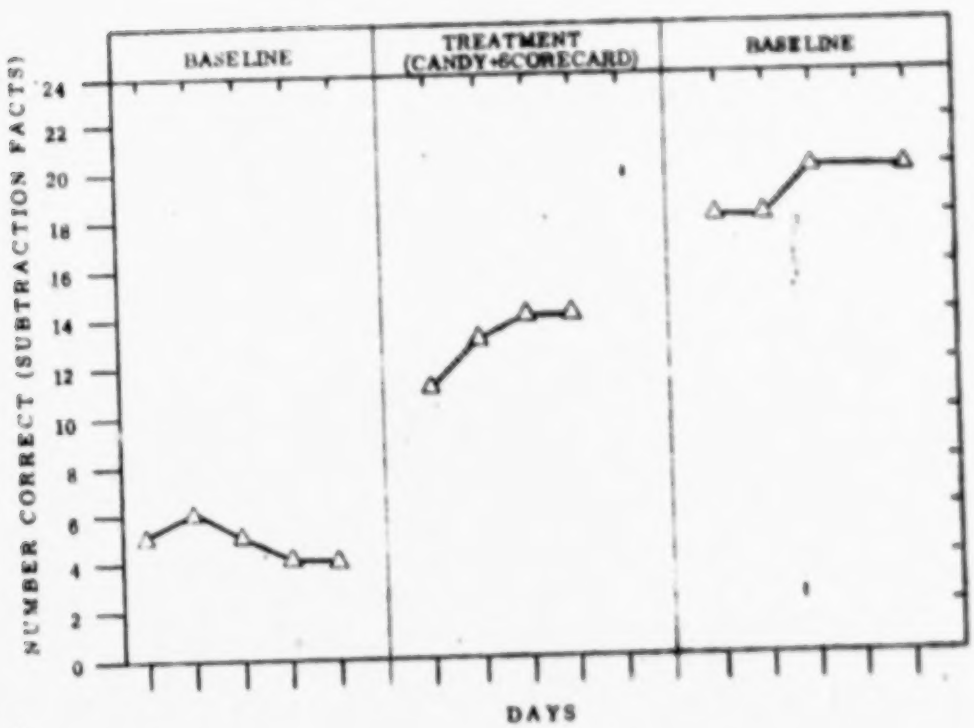

Figure 2

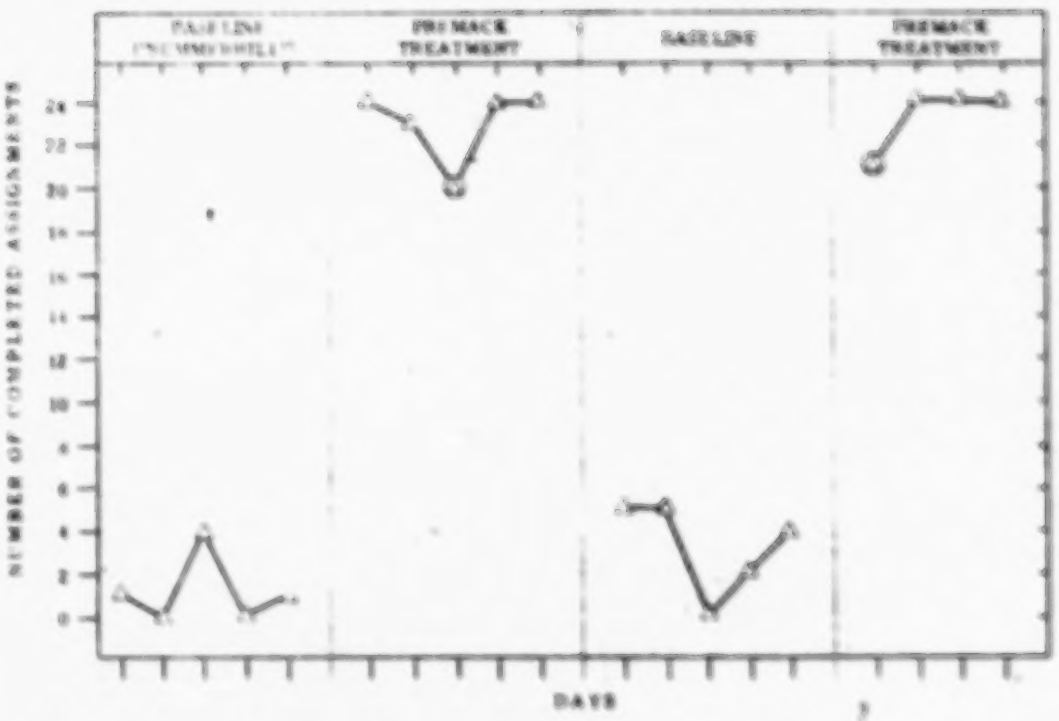
PRIMACK TREATMENT
BASELINE
PRIMACK TREATMENT
NUMBER OF COMPLETED ASSIGNMENTS
DAYS

Figure 3